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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,966	07/31/2002	Udo Holker	100725-28 / Dreisler 1101	4776
7590 10/22/2003 Norris McLaughlin & Marcus 30th Floor 220 East 42nd Street New York, NY 10017			EXAMINER SRIVASTAVA, KAILASH C	
			ART UNIT 1651	PAPER NUMBER

DATE MAILED: 10/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/070,966		HOLKER, UDO	
	<b>Examiner</b>		<b>Art Unit</b>	
	Dr. Kailash C. Srivastava		1651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 July 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27-52 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |                                                                                              |                                                                             |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

1. Applicants' Preliminary amendments filed March 13, 2002 and July 31, 2002 are acknowledged and entered.
2. Applicants should note that the correct application number for this application under prosecution is 10/070,966.
3. The correct Art Unit of your application in the USPTO is 1651 and assigned Examiner is Dr. Kailash C. Srivastava. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Examiner Kailash C. Srivastava in Art Unit 1651.
4. Claims 27-52 are pending

## Priority

5. Applicant's claim for foreign priority based on Germany application 199943853.6 filed on 09/13/1999 as required by 35 U.S.C. § 119(a-d) is acknowledged.

## Claims Objection

6. Claim 47 is objected to, because in said claim is recited the limitation, "wherein said substances are selected from coal, wood and loaded soils". There is insufficient antecedent basis for this limitation in the cited claim, because Claim 44 from which Claim 47 depends does not recite said limitation. Appropriation Correction is required.

## Claim Rejections - 35 U.S.C. § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

***The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.***

8. Claims 27-52 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - The recitations, "characterized by" in claim 27 is indefinite because it is not clear whether the term includes other ingredients, like the conventional term "comprising", or whether the term excludes other ingredients like the conventional term "consisting of". The term will be read as including other ingredients. Examiner suggests that applicant use the term "having".

- Recitation, "bioreactive substance" in claims 33-34 renders those Claims unclear and indefinite, because the recitation "bioreactive substance" in and of itself does not establish the metes and bounds for said recitation. Applicants should clearly define the recitation "bioreactive substance".
- Recitation, "reaction medium" in claims 45 and 50 renders those Claims unclear and indefinite, because the recitation "reaction medium" in and of itself does not establish the metes and bounds for said recitation. For example it is not clear whether said medium is acidic, alkaline, neutral, organic, inorganic, aqueous or alcoholic solution or is a gas. Applicants should clearly define the recitation "reaction medium".
- The recitation "suitable" in claim 49 is unclear and indefinite. It is not clear how one can determine with clarity and accuracy when something is suitable and what may be suitable for one material, condition or reaction may not be suitable for another. Applicant is advised to define the term "suitable".
- Claim 51 fails to recite one or more essential steps necessary for the claimed invention. Claim lacks a recovery step for the product produced by said claimed method. Appropriate correction is required.

All other claims depend directly, or indirectly from the rejected Claim 12 and are, therefore, also rejected under 35 U.S.C. §112, second paragraph for the reasons set forth above.

### **Conclusion**

9. No Claims are allowed.

Closest prior art references are as follows:

Laurenson, J.G., Jr. US 5,153,137

Burner et al. EP 509980

Ranner, D. EP 489705B

Srivastava et al. US 5,670,345

Laurenson (US 5,153,137), Burner et al. (EP 509980, English abstract) and Ranner (EP 489705B, English abstract) disclose bioreactors having vertical pipes and other features as claimed in the claimed invention, but they lack having a second horizontal nozzle arrangement as claimed in the instant invention. These references do not suggest or indicate the second horizontal pipes with orifices.


The Srivastava et al. (US 5,670,345) reference, teaches fermentation of German brown coal (i.e., lignite), however, said reference neither anticipates, nor makes obvious the claimed invention because it

does not teach fermentation in a bioreactor, wherein air/gas is sparged from the top of the reaction, nor does it teach that said coal is solubilized by a fungus.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Kailash C. Srivastava whose telephone number is (703) 605-1196. The examiner can normally be reached on Monday-Thursday from 7:30 A.M. to 6:00 P. M. (Eastern Standard Time or Eastern Daylight Saving Time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Wityshyn, can be reached on (703) 308-4743 Monday through Thursday. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0196.

  
Kailash C. Srivastava, Ph.D.  
Patent Examiner  
Art Unit 1651  
(703) 605-1196

October 20, 2003



CHRISTOPHER R. TATE  
PRIMARY EXAMINER